

C4
Cancelled

CH-A-665 473, it is not designed or suitable for carrying out precrystallisation and crystallisation, i.e. it requires an additional device for a separate crystallisation step.

Page 5, after the first full paragraph, please insert the following section heading:

C5

BRIEF DESCRIPTION OF THE DRAWINGS.

C6

Page 6, before the first full paragraph, insert the following section heading:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT.

In the Claims:

Please rewrite Claims 1-17 to read as follows:

1. A device for crystallising plastic material, in particular polyethylene terephthalate, comprising a treatment space (12) for accommodating the plastic material in the shape of pieces or pellets, said treatment space (12) being able to be charged with plastic material via at least one feed aperture (14) and discharged by at least one discharge aperture (19); a feed device (15) for a treatment gas via a floor region (16) of the treatment space (12) and at least one upright partition wall (13) provided in the treatment space (12) for dividing the treatment space (12) into at least two compartments (12', 12'') which are interconnected via a free space (18) near a bottom of said partition for conveying the plastic material from one compartment (12', 12'') to another compartment (12', 12'') so that from the feed aperture (14) to the discharge aperture (19) the plastic material passes in opposite directions in two compartments along a predefined, substan-

tially vertical path (21); wherein the two compartments (12', 12'') are provided in an at least approximately rotationally-symmetrical housing (11).

2. A device according to claim 1, wherein due to the arrangement of free space or the free spaces (18) and the discharge opening (19) in the path (21) at different levels, the path zigzags or meanders through the treatment space.

3. A device according to claim 1 or 2, wherein at least one free space (18) is provided at the bottom of the associated partition wall (13), and that the discharge aperture (19) is provided near a top of the subsequent compartment (12'').

4. A device according to claims 1 or 2, wherein a partition wall (13) is provided below the feed aperture (14), for deflecting the incoming plastic material by means of a funnel section (13'), so as to deflect the material to a preceding compartment (12'), thus at least partially covering the subsequent compartment (12'') by the funnel section (13').

5. A device according to claims 1 or 2, wherein the first compartment (12') takes up more than half, preferably more than 2/3 of the area in top view of the treatment space (12) which is at least approximately rotationally-symmetrical, and that this first compartment (12') is followed by a second compartment (12'') which is accordingly smaller.

6. A device according to claims 1 or 2, wherein a monitoring arrangement such as an inspection glass (24) is associated with at least one compartment (12"),.

7. A device according to claims 1 or 2, wherein the floor region of the treatment space (12) is the perforated floor (16) of a fluidised bed.

8. A method for treating plastic material, in particular polyethylene terephthalate, in which the material which has a relatively low temperature is first crystallised during heating before said material is led to heating or condensation in a solid phase, in particular using a device according to claim 1 wherein the material is exposed to hot treatment gas for at least 10 minutes in at least two spaces (12', 12") and thus for crystallisation is heated to a temperature exceeding 135 °C, and that said material subsequently, in a preheating space (31) comprising up to eight stages, is heated to a temperature of at least 185 °C.

9. A method according to claim 8, wherein the hot treatment gas is admitted during crystallisation at a temperature of 165 to 185. degree. C.

10. A method according to claim 8 or 9, wherein for evening out the treatment and thus the product quality, the crystallised material is brought into the shape of a bulk material stream of four-sided, in particular rectangular cross-section of essentially

even bulking across the cross-section, with treatment gas flowing from one side (L) of the four-sided cross-section.

11. A method according to claim 10 wherein the ratio of the rectangular sides (B:L) of the cross-section of the bulk material stream is approximately 1:2 to 1:15 with the treatment gas being conducted through the bulk material stream from the larger side of the rectangle (L).

12. A method according to claim 10 or 11, wherein the treatment gas is applied to one side (L) of the four-sided cross-section in at least two stages, each of increased temperature, ~~preferably~~ from the opposite side.

13. A method according to claim 12, wherein the treatment gas is conveyed in reverse flow from a stage (34-37) of ~~lower~~ temperature to a stage (35-38) of ~~higher~~ temperature.

14. A method according to claim 12 or 13, wherein the treatment gas is conveyed, in a zigzagging or meandering way, several times through the four-sided cross-section of the bulk material in at least three stages (34-37 or 35-38).

15. A method according to claim 12 or 13, wherein the bulk material of four-sided cross-section is conveyed essentially vertically, and that the treatment gas is conveyed essentially horizontally through the four-sided cross-section.

16. A method according to one of claims 8, 9, 12 or 13, wherein precrystallisation and crystallisation are preferably carried out within a duration of 10 to 80 minutes.,

17. A method according to one of claims 8, 9, 12 or 13, wherein heating following crystallisation, including precondensation, takes place within a duration of 60 to 120 minutes.

Please add the following new Claims 18-26

18. A device according to Claim 6 wherein at least one compartment is the last compartment.

19. A method of Claim 8 wherein the material is heated to temperature of approximately 140° - 180° for crystallization.

20. A method of Claim 8 wherein the pre-heating space comprises at least two stages.

21. A method of Claim 8 wherein the material in the pre-heating space is heated to a temperature of at least 200°C.